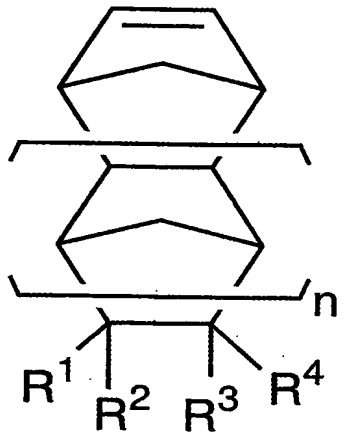
CLAIMS

1. A radiation sensitive resin composition which comprises (A) an alicyclic olefin resin soluble in an alkali, (B) an acid-generating agent, (C) a crosslinking agent and (D) a solvent, wherein the alicyclic resin soluble in an alkali is a ring-opening polymer having an acidic group which is obtained by ring-opening polymerization of a polymerizable monomer comprising an alicyclic olefin monomer having an acidic group in a presence of a catalyst comprising ruthenium, followed by hydrogenating an obtained polymer.

2. A radiation sensitive resin composition according to Claim 1, wherein the acidic group is carboxyl group or phenolic hydroxyl group.

3. A radiation sensitive resin composition according to Claim 1, wherein the alicyclic olefin monomer having an acidic group is an alicyclic olefin monomer represented by following formula (1):



(1)

wherein R^1 to R^4 each independently represent hydrogen atom or a group represented by $-X_m-R'$, X representing a divalent group, **m** representing 0 or 1, and R' representing an alkyl group having 1 to 7 carbon atoms which may have substituents, an aromatic group or an acidic group; at least one of R^1 to R^4 represents a group represented by $-X_m-R'$ in which R' represents an acidic group; and **n** represents an integer of 0 to 2.

4. A radiation sensitive resin composition according to Claim 1, wherein the catalyst comprising ruthenium is a catalyst comprising as a main component an organoruthenium compound in which a neutral electron-donating ligand is coordinated.

5. A radiation sensitive resin composition according to Claim 4, wherein the neutral electron-donating ligand is a heterocyclic carbene compound having nitrogen atom.

6. A radiation sensitive resin composition according to Claim 1, wherein the polymerizable monomer further comprises an alicyclic olefin monomer in which a group having an aromatic group and an aprotic polar group are bonded.

7. A process for forming a resin pattern film on a substrate which comprises laminating a resin film comprising a radiation sensitive resin composition described in any one of Claims 1 to 6 to the substrate, irradiating the resin film with an active radiation to form a latent pattern in the resin film and developing a pattern by bringing the resin film

having the latent pattern into contact with a developing solution.

8. A transparent resin pattern film formed in accordance with a process described in Claim 7.

9. A resin film for electronic parts comprising a resin pattern film described in Claim 8.